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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/720,070	09/27/1996	RICHARD G HYATT JR.	P53821C	1185
7590 ROBERT E BUSHNELL, ATTORNEY-AT-LAW 1522 K STREET,N.W. SUITE 300 WASHINGTON, DC 200051202			EXAMINER BARRETT, SUZANNE LALE DINO	
			ART UNIT	PAPER NUMBER
			3673	
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			12/18/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

08/720,070

**Applicant(s)**

HYATT, RICHARD G

**Examiner**

Suzanne Dino Barrett

**Art Unit**

3673

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 September 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-56,64-84,90-100,105-116 and 119-121 is/are pending in the application.  
4a) Of the above claim(s) 43-45,73 and 94 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-26,28,30-42,46-52,54-56,64-70,75-77,82-84,90-93,95-100,105-116 and 119-121 is/are rejected.  
7) ☒ Claim(s) 27,29,53,71,72,74,78-81 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-843)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 90 and 120 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Specifically, the instant specification fails to provide support for the “at least one electromechanical locking member” and “plurality of electromechanical locking members” set forth in claims 90 and 120, respectively. This rejection stands, since, firstly, the solenoid coils 109, argued on page 69 of the amendment filed 2/24/03, are not disclosed “locking members”. Secondly, the specification discloses that the “plurality” of locking members 106a, 107a, 108a are used alternatively and not as a plurality within the same plug. See the specification on page 12, lines 11-13 which clearly recites the use of locking member 106a or 107a or 108a.

**Double Patenting**

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-5,11-13,34,65-69,75,92-100,112,121 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-78 of U.S. Patent No. 6,564,601. Although the conflicting claims are not identical, they are not patentably distinct from each other because they merely recite like elements using different terminology and/or phraseology such as "detent" instead of "bar". It is noted that claims 1 and 11 recite a "detent", but not a "stationary detent", and thus, the side bar detent of the patent reads on this limitation.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 25,26,28,30-33,39-42, 46-52,54-56,64,70,76,77,82-84,90,91,105,107,108,109,111, 113-116,119-121, as best understood, are rejected under 35 U.S.C. 103 (a) as being unpatentable over Gokcebay 5,552,777 in view of Thordmark et al 5,542,274 and Naveda 4,416,127.

Gokcebay teaches all of the elements of the claimed invention including a cylinder 46, plug 24, elongate member (pin tumblers not shown-col.6, lines 61-62), orifice (housing contact/conductor 28 in Fig.3), radially oriented aperture (houses electrical operator 36 with spring biased 48 movable member 38), and electronic logic circuit (fig.2, col.5, line 56 to col.6, line 37). Gokcebay fails to teach a bar/detent which moves radially to the axis of the plug and the electronic operator having an electronic locking member which moves independently of the movement of the bar/detent which is reciprocated between a blocking and releasing position as a result of independent movement of the locking member. Thordmark et al teach a cylinder having an electronic operator 12, a movable

electronic locking member 11 which alternately allows and blocks reciprocation of a spring biased sidebar 10 (col.5, lines 38-47). Thordmark et al teach the electrically actuated blocking element being mounted in the cylinder and not the plug. While Gokcebay recognizes the existence of electro-mechanical locks having the blocking tumbler mounted in the cylinder casing like Thordmark, it is the object of the Gokcebay invention to provide a system which is very easily retrofitted into lock systems having a single key operating a number of locks, and which avoids dealing with electronics, solenoids or other hardware which would take up space within the lock casing adjacent the lock (col.2, lines 49-55).

Naveda reinforces that one having ordinary skill in the art of electro-mechanical or magneto-electric lock systems would have known of the versatility and interchangeability of known electronic elements usable in verifying and actuating electric lock cylinders including among others, miniature coils, miniature electromagnets, electronic memories bioelectric circuits, resistance plates and the like (col.3, line 1-13 and col.4, lines 30-35). Furthermore, Naveda teaches that the electromagnet can be located in the receiver, or alternately, in the body of the key having any size or shape (col.4, line 60, col.9, lines 22-25). It would have been obvious to one of ordinary skill in the art to replace the simple blocking element of Gokcebay with the multi-part electrically actuated blocking element of Thordmark et al to thwart natural attempts to force system locks that are equipped with electronic blocking functions, of the kind meant by Thordmark (col. 1, lines 38-42), by making forcing of such locks more difficult. It would have further been an obvious reversal of parts and change of size to select miniature

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logic circuitry and a miniature solenoid and locking member 11 such that the blocking mechanism fits within a conventional sized lock plug as taught by Gokcebay and Naveda.

***Allowable Subject Matter***

7. Claims 27,29,78-81 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

8. Applicant's arguments filed 9/25/08 have been fully considered but they are not persuasive.

9. With respect to Applicant's arguments pertaining to the rejections of claims 90 and 120, the examiner submits that applicant is merely reiterating his previous arguments and further rebuttal is not necessary. The examiner's position is clear and has been previously set forth on numerous occasions. Applicant is referred to the previous office actions and examiner's answer for her position.

10. With respect to the provisional obviousness- type double patenting rejection, the examiner submits that applicant is merely reiterating his previous arguments and further rebuttal is not necessary. The examiner's position is clear and has been previously set forth on numerous occasions. Applicant is referred to the previous office actions and examiner's answer for her position.

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11. With respect to the individual claim arguments, Applicant is directed to the previous office action and the Examiner's arguments set forth on pages 19-20 of the Examiner's Answer of 9/27/2006. The examiner submits that applicant is merely reiterating his previous arguments and further rebuttal is not necessary. The examiner's position is clear and has been previously set forth on numerous occasions. Applicant is referred to the previous office actions and examiner's answer for her position.

12. With respect to Applicant's arguments pertaining to the prior art rejection, the Examiner respectfully submits that Gokcebay teaches all of the elements of the claimed invention including a cylinder shell 20, plug/barrel 24, elongate members (conventional pin tumblers in bores 52-col.6, lines 61-62), a key engaging surface provided in the keyway and in the housing contact/conductor 28 in Fig.3, a radially oriented aperture which houses a solenoid/electrical operator 36 with a spring biased (48) movable member comprising a bar/detent/blocking pin 38, and electronic logic circuit (fig.2, col.5, line 56 to col.6, line 37).

The difference between the claimed invention and Gokcebay is Gokcebay fails to teach a bar/detent/blocking pin being engaged by a locking member which moves independently of the movement of the bar/detent which is reciprocated between a blocking and releasing position as a result of independent movement of the locking member via the electrical operator. Thordmark et al teach a cylinder having an electronic operator 12, a laterally movable electronic locking member 11 which alternately allows and blocks



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reciprocation of a radially spring biased sidebar/detent 10 (col.5, lines 38-47).

Thordmark et al teach the electrically actuated blocking element being mounted in the cylinder shell and not the plug. While Gokcebay recognizes the existence of electro-mechanical locks having the blocking tumbler mounted in the cylinder casing like Thordmark et al, it is the object of the Gokcebay invention to provide a system which is "very easily retrofitted into lock systems having a single key operating a number of locks, and which avoids the need for electronics, solenoids or other hardware which would take up space within the... lock casing adjacent the lock" (col.2, lines 49-55). Gokcebay itself provides motivation for moving the electronics and hardware into the plug, rather than the shell, for retrofitting purposes and further states that "the most important features being that the blocking pin 38, solenoid 36 and operating devices are located within the lock itself, without requiring any further space...in a lock casing" (see col. 10, lines 11-19). Naveda is applied to reinforce that one having ordinary skill in the art of electro-mechanical or magneto-electric lock systems would have known of the versatility and interchangeability of known electronic elements usable in verifying and actuating electric lock cylinders including among others, miniature coils, miniature electromagnets, electronic memories bioelectric circuits, resistance plates and the like (col.3, line 1-13 and col.4, lines 30-35). Furthermore, Naveda teaches that the electromagnet can be located in the receiver, or alternately, in the body of the key having any size or shape (col.4, line 60, col.9, lines 22-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the simple blocking element

of Gokcebay with the multi-part (detent 10 and locking member 11 therefor) electrically actuated blocking element of Thordmark et al to thwart natural attempts to force system locks that are equipped with electronic blocking functions, of the kind meant by Thordmark (col. 1, lines 38-42), by making forcing of such locks more difficult. It would have further been an obvious reversal of parts and change of size to select miniature logic circuitry and a miniature solenoid and locking member 11 such that the blocking mechanism fits within a conventional sized lock plug as taught by Gokcebay and Naveda.

As set forth above, it is maintained that the prior art references, taken in combination, set forth a *prima facie* case of obviousness of the claimed invention. It is maintained that the combination of teachings of Gokcebay, Thordmark and Naveda, as discussed throughout these proceedings, would have provided motivation to one of ordinary skill in the art at the time the invention was made to place the movable locking member in the plug as claimed.

With respect to the claim language, it is noted that in the lock art, a rotatable plug is the same as a rotatable barrel, a lock cylinder is the same as a cylinder shell, and electrical operator is a general term comprising solenoid, motor, electromechanical member. With respect to the language of claim 46 (by example), the Examiner submits that Gokcebay teaches a rotatable lock plug (barrel) 24 comprising a cylindrically shaped plug (barrel) 24 for receipt in a bore of a lock cylinder 20, having a first base (front face 30) and second base (rear face which receives a conventional cam), a blocking pin (bar/detent) 38 borne by the plug (barrel) 24, the plug (barrel) 24 having a recess formed therein for

receipt of the blocking pin (detent) 38 and a solenoid (electrical operator) 36 wherein in one position the solenoid (electrical operator) limits movement of the blocking pin (detent) and in a second position the solenoid permits movement of the blocking pin (detent) 38. It is agreed that Gokcebay fails to teach a locking member within the plug which is driven by the electrical operator to limit movement of the blocking pin (bar/detent). As discussed generally above, Thordmark teaches a radially movable elongate sidebar/detent 10 and locking member 11 in the shell wherein the locking member 11 is moved laterally by an electrical operator/drive mechanism (motor 12 or electromagnet 17), perpendicularly to the sidebar/detent plane, to limit movement of the detent 10. While Gokcebay itself teaches motivation for providing all electronics and hardware within the plug (col. 2, lines 53-55; col. 3, lines 2-6; col. 10, lines 12-19, especially), instead of the shell as in Thordmark, Naveda further teaches the miniaturization of lock elements as discussed above. Accordingly, the wholesale substitution of Thordmark's locking member and detent for the blocking pin (detent) 38 of Gokcebay would have been obvious to a person of ordinary skill in the art at the time the invention was made in view of the combined teaching of Gokcebay, Thordmark and Naveda, since such person would have been motivated based on the desirability to miniaturize and place all elements within the plug (barrel) for easily retrofitting plugs (barrels) in electro-mechanical cylinder locks taught by Gokcebay and Naveda and further, for enhancing the lock device by providing a secondary locking means for the detent as taught by Thordmark.

Gokcebay clearly teaches a key engaging conductor surface 28 on the plug, exterior to the first base 30, memory borne by the plug storing a code corresponding to the plug and read by the key, and a solenoid (electrical operator) 36 to move the detent 38 in response to a correct code recognized by the key. Gokcebay's solenoid (electrical operator) 36 clearly blocks the blocking pin (detent) 38 from moving relative to the plug (barrel) 24 or cylinder shell 20 absent reception by the solenoid (operator) 36 of said data signal conforming to said code. (See col. 3-col. 4 of Gokcebay; col. 7, lines 11-14; col. 8, lines 15,21-24). Gokcebay further teaches the key engaging surface 28 on the plug 24, enabling driving of the plug by code means releasing the detent to allow rotation/torquing of the key and plug through the engagement of the key in the keyway. (Gokcebay col. 3, line 64 - col. 4, line 2).

With respect to claims 90 and 105, the Examiner submits that Gokcebay clearly teaches the structure set forth in instant claim 90, but fails to specify the process steps set forth in fitting a lock with a new plug. However, since Gokcebay clearly teaches the use of the plug 24 in retrofitting cylinder locks, and it is conventionally known that in retrofitting or changing cylinder locks, it is inherent that the cylinder lock would be removed, the plug removed from the cylinder and replaced with a new plug. Gokcebay clearly teaches, as discussed throughout this answer, that all electronics and hardware such as detents and electrical operators, are placed within the retrofittable plug, rather than the conventional placement in the cylinder shell, in order to easily retrofit new plugs into existing cylinder shells. (col. 3, lines 2-6; col. 2, lines 53-55). Gokcebay

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further teaches a key engaging surface 28 on the plug 24, enabling driving of the plug by code means releasing the detent to allow rotation/torquing of the key and plug through the engagement of the key in the keyway, a memory borne by the plug storing a code and an solenoid (electrical operator) 36 to move the detent 38 radially in response to a correct code recognized by the key. Gokcebay's solenoid (electrical operator) 36 clearly blocks the blocking pin (detent) 38 from moving relative to the plug (barrel) 24 or cylinder shell 20 absent reception by the solenoid (operator) 36 of said data signal conforming to said code (Gokcebay col. 3, line 64 - col. 4, line 2).

Thus, while it has been repeatedly shown that Gokcebay teaches the claimed structure, it is also shown that Gokcebay teaches the general process of retrofitting a plug in a cylinder lock. Since the specific steps are not taught, this rejection is under 35 USC §103. It would have been obvious to one of ordinary skill in the lock art to employ the well known steps in the lock art of changing a lock plug within a cylinder by removing the old cylinder plug and inserting the new plug (Gokcebay teaches that it is well known that "[l]ocks may be changed in the manner of typical mechanical locks, by replacing the cylinder, or refitting the mechanical bitting (new sets of tumblers) and changing the cylinder plug. (col. 4, lines 33-43).

In response to Applicant's arguments regarding the rationale of incorporating Thordmark's shell structure into the Gokcebay plug for retrofitting purposes, it is noted that Gokcebay states (col.2, lines 49-55) that an object of the invention is "to provide a system which is very easily retrofitted into lock

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systems having a single key operating a number of locks, and which avoids the need for electronics, solenoids or other hardware which would take up space within the...lock casing adjacent the lock." Gokcebay further teaches (col. 3, lines 1-6) that the lock

"has an electronic access feature which occupies no more space than the mechanical lock itself. Nothing is required outside the lock cylinder, and in fact, in preferred embodiments, all electronics and hardware are contained in the cylinder plug, aside from a small recess or bore which is provided in the cylinder shell."(emphasis added)

Accordingly, contrary to Applicant's arguments, it has been determined that motivation is present in the Gokcebay patent. It is determined that Gokcebay clearly teaches that

"the purpose of providing the entire blocking system within the plug is to "provide a system which is very easily retrofitted into lock systems...and which avoids the need for electronics, solenoids or other hardware which would take up space within...the lock casing adjacent to the lock" (col. 2, lines 49 through 54)."

13. Once again, the examiner submits that applicant has merely reiterated his previous arguments and further rebuttal is not necessary. The examiner's position is clear and has been previously set forth on numerous occasions. Applicant is referred to the previous office actions and examiner's answer for her position.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suzanne Dino Barrett whose telephone number is 571-272-7053. The examiner can normally be reached on M-Th 8:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Engle can be reached on 571-272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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